

REMARKS

Claims 23-46 are pending in this case. Based upon the following remarks, it is respectfully submitted that all pending claims are allowable.

A. Double Patenting

Claims 23 and 35 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Pat. No. 7,062,666, in view of Jones et al., U.S. Patent No. 4,750,112 ("*Jones*"). This rejection is respectfully traversed.

According to the Examiner, "[c]aim 1 of [U.S. Pat. No. 7,062,666] contains all limitations of claims 23 and 35 of this application except for an operation suspension instruction received by the first pipeline subcircuit portion and in response thereto asserting one or more control signals from said first pipeline subcircuit portion." But, further according to the Examiner, *Jones* discloses, at column 9, lines 25-28, a method for suspending operation of a pipeline data processor to reduce power consumption comprising the step of receiving an operation suspension instruction in the form of machine instruction I21 (emphasis added). It is respectfully submitted that this is clearly not correct and is contradictory to the express language of *Jones*, particularly in the portion of *Jones* cited by the Examiner.

First, machine instruction I21 of *Jones* is not an operation suspension instruction. Rather, it is expressly described at column 9, lines 22-32, of *Jones* that machine instruction I21 is an operation activation instruction, i.e., as opposed to an operation suspension instruction. More specifically, "[machine instruction] I21 will modify a register required by [machine instruction] I22 to generate the operand address associated with [machine instruction] I22" (*Jones* at column 9, lines 25-27, with emphasis added), in response to which the IP is suspended during time period T24. In other words, while a brief suspension of the IP may be one possible result of machine instruction I21, any such suspension is not the purpose of machine instruction I21. As noted, the purpose of machine instruction I21 is to support the operation of the IP, and it is only

because, as a result of this operation support, machine instruction I21 will modify a register required by machine instruction I22 that the IP is suspended. Hence, machine instruction I21 of *Jones* is not an operation suspension instruction.

Second, notwithstanding any suspension of the IP, the purpose of any such suspension, contrary to the assertion of the Examiner, is not “to reduce power consumption”. As noted immediately hereinabove, any such suspension of the IP is to allow operation to continue, i.e., “so that the results stored for [machine instruction] I21 in the ES stage can be used by the AG stage for [machine instruction] I22” (*Jones* at column 9, lines 30-32).

Therefore, it is respectfully submitted that even if “[c]laim 1 of [U.S. Pat. No. 7,062,666] contains all limitations of claims 23 and 35 of this application”, which is neither agreed nor admitted hereby, *Jones* does not disclose or suggest “an operation suspension instruction received by the first pipeline subcircuit portion and in response thereto asserting one or more control signals from said first pipeline subcircuit portion.”

B. §102 Rejection

Claims 23, 24, 26, 28-30, 34-36, 38, 40-42 and 46 were rejected under 35 U.S.C. §102(b) as being anticipated by *Jones*. This rejection is respectfully traversed and it is submitted that these claims recite subject matter which is patentable over *Jones*.

Regarding independent claims 23 and 35, reference is hereby made to all remarks submitted in Amendment C (incorporated herein by reference), with specific reference hereby made to those in Part A as reproduced below (emphasis in original):

[A]s is expressly recited [in independent claims 23 and 35] (with emphasis added), the execution of the “one or more data processing instructions” is done with the “second pipeline subcircuit portion” in response to the enabled “first clock signal”, and, responsive to reception of the “operation suspension instruction” with the “first pipeline subcircuit portion”, the “first clock signal” is disabled. Hence, if the IP and EP of *Jones* correspond to the presently recited first and second “pipeline subcircuit portions”,

respectively, as asserted by the Examiner, responsive to reception of I21 by the IP (“first pipeline subcircuit portion”), the clock signals of the EP (“second pipeline subcircuit portion”) must be disabled. However, as is clearly depicted in Figure 5 of *Jones*, all six clock signals of the EP remain enabled at least inasmuch as each has a clock pulse during T24. Instruction I21 is a machine instruction that, in some instances, may temporarily delay the instruction fetch pipeline clock due to an execution data dependency, i.e., where the data needed is not yet available from the execution pipeline. This is in stark contrast to the presently claimed invention in which the subject clock is stopped with no such execution data dependency.

Moreover, it is respectfully submitted that this is contrary to the assertions made by the Examiner in the “Response to Arguments”. First, contrary to the assertion by the Examiner that “any one of the six clock signals associated with the three stages of the IP is considered as the first clock signal”, if the IP and EP of *Jones* correspond to the presently recited first and second “pipeline subcircuit portions”, respectively, as asserted by the Examiner as noted hereinabove, then the “first clock signal” must be a clock signal associated with the EP--not with the IP. Second, contrary to the assertion by the Examiner that “the claim language does not require the second pipeline subcircuit portion to be operated by the first clock signal” and that, therefore, “the clock signals of the EP do not necessary [sic] to be disabled during T24 which the first clock signal is disable [sic]”, the Examiner is referred to express language of independent claims 23 and 35 which recites: “executing said one or more data processing instructions with a second portion of said pipeline subcircuit subsequent to said first pipeline subcircuit portion in response to said enabled first clock signal” (emphasis added).

Regarding dependent claims 24, 26, 28-30, 34, 36, 38, 40-42 and 46, in accordance with and with reference to the remarks in this Part immediately hereinabove, it is submitted that independent claims 23 and 35 recite subject matter which is patentable over *Jones*. Therefore, it is still further submitted that their respective dependent claims 26, 28-34, 38 and 40-46 recite

subject matter which is patentable over *Jones* as well, particularly in view of these latter claims' further recited limitations.

C. §103 Rejection

Claims 31-33 and 43-45 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Jones*. This rejection is respectfully traversed and it is submitted that these claims recite subject matter which is patentable over *Jones*.

In accordance with and with reference to the remarks Part B hereinabove, it is submitted that independent claims 23 and 35 recite subject matter which is patentable over *Jones*. Therefore, it is still further submitted that their respective dependent claims 31-33 and 43-45 recite subject matter which is patentable over *Jones* as well, particularly in view of these latter claims' further recited limitations.

D. Allowable Subject Matter

Claims 25, 27, 37 and 39 were cited as being objectionable for being dependent upon rejected base claims but were identified as being allowable if rewritten in independent form to include all limitations of their respective base claims and any intervening claims. This objection is respectfully traversed. In accordance with and with reference to the remarks in Parts B and C hereinabove, it is submitted that independent claims 23 and 35 and their respective dependent claims 26 and 38 recite subject matter which is patentable over *Jones*. Therefore, it is further submitted that dependent claims 25, 27, 37 and 39 are not objectionable.

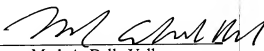
E. Conclusion

Claims 23-46 remain pending in this case. Based upon the foregoing remarks, it is respectfully that these claims are allowable and this application is in condition for allowance. Reconsideration and early allowance are submitted requested.

Respectfully submitted,

VEDDER, PRICE, KAUFMAN & KAMMHOLZ, P.C.

Date: Aug. 8, 2007

By:   
Mark A. Dalla Valle  
Reg. No. 34,147

Attorney for Assignee  
222 N. LaSalle St.  
Chicago, IL 60601  
312-609-7620  
Customer No.: 23,418